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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,649	10/23/2003	Joachim Hossick-Schott	P-10579.00	8641

27581 7590 01/25/2007  
MEDTRONIC, INC.  
710 MEDTRONIC PARK  
MINNEAPOLIS, MN 55432-9924

EXAMINER
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HA, NGUYEN T

ART UNIT	PAPER NUMBER
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2831

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/692,649	<b>Applicant(s)</b> HOSSICK-SCHOTT ET AL.	
	<b>Examiner</b> Nguyen T. Ha	<b>Art Unit</b> 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/06/2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 45-50 and 52-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 45-50 and 55-63 is/are allowed.
- 6) ☒ Claim(s) 52-54 and 64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them.

The reply filed on 11/06/2006 is not fully responsive to the prior Office Action because of the following omission(s) or matter(s): failure to response to the previous office action. See 37 CFR 1.111. Since the above-mentioned reply appears to be *bona fide*, applicant is given **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

### *Response to Amendment*

2. The examiner acknowledges the applicant's submission of the amendment dated 5/30/2006. At this point, claims 1-14 and claims 28-44, and 51 have been withdrawn, claims 15-27 have been cancelled. Thus, claims 45-50, 52-64 are pending in the instant application.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 52-54 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akami et al. (US 6,375,688) in view of O'Phelan et al. (US 6,709,946).

Regarding claim 52, Akami et al. disclose a capacitor apparatus (figures 1-4) comprising:

- a porous sintered valve metal anode member (31) having at least two cavities (32) formed therein;
- a conductive lead wire (20) coupled to the anode member;
- at least one cathode member (33) disposed in electrical communication with the anode member; and
- a housing means (37) for retaining the anode member and cathode member.

Akami et al. lack the cathode member includes one of a carbon material, stainless steel material, a carbide material, a titanium material and a ruthenium material.

O'Phelan et al. teach a cathode member include titanium (column 3, lines 34-36).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the cathode of O'Phelan et al, substituted into Akami capacitor in order to produce the high conductivity and high capacitance for the capacitor.

Regarding claim 53, Akami et al. disclose the anode member includes one of an aluminum material (column 7, line 49).

Regarding claim 54, Akami et al. disclose the at least two cavities comprises at least one surface feature on the anode member and the at least one surface feature comprises a ridge (figure 4).

Regarding claim 64, the teaching of O'Phelan et al. includes the cathode having a coat of at least one of titanium oxide (column 8, lines 49-51 and column 9, lines 1-7).

***Allowable Subject Matter***

5. Claims 45-50 and 55-63 are allowed.

The following is an examiner's statement of reasons for allowance:

With respect to claims 45-50, the prior art alone or in combination does not teach the limitation of a capacitor having the valve metal anode includes a cross-sectional density gradient and a peripheral portion of the valve metal anode is relatively less dense than a central portion of the valve metal anode.

With respect to claims 55-56, the prior art alone or in combination does not teach the limitation of a capacitor having the cathode member comprises an elongated cathode member and the elongated cathode member is at least partially inserted into one of the at least two cavities, and wherein the cathode member has a core surrounded by a high capacitance material and a separator layer surrounding the high capacitance material.

With respect to claims 57-63, the prior art alone or in combination does not teach the limitation of the capacitor having an anode member and the cathode member each have major surfaces and the major surface of the anode member is disposed substantially orthogonal to the major surface of the cathode member.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T. Ha whose telephone number is 571-272-1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext. 31. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NGUYEN T. HA  
PRIMARY EXAMINER

*NH*

*January 21, 2007*